

### REMARKS

This communication is in response to the Final Office Action dated April 10, 2008. Claims 1, 4, 7, 10, 15 and 17 have been amended. No new matter has been added. Claims 1-8 and 10-17 remain pending, with claim 1 being the only independent claim. Reconsideration in view of the arguments presented below is respectfully requested.

### REJECTIONS UNDER 35 USC § 102(b)

**Claims 1-8, 10, 11, and 15-17 stand rejected under 35 U.S.C. 102(b) as anticipated by Karau (US 6,472,571).**

The Examiner contends that applicant's arguments traversing the rejection of claims 1-8, 10, 11 and 15-17 as being anticipated by Karau is not found persuasive.

Anticipation requires identity of invention. See MPEP 2131. See also *Glaverbel Societe Anonyme v. Northlake Mktg. & Supply*, 33 USPQ2d 1496, 1498 (Fed. Cir. 1995). Each and every element recited in a claim must be found in a single prior art reference and arranged as in the claims. *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). There must be no differences between what is claimed and what is disclosed in the prior art reference. *In re Kalm*, 154 USPQ 10, 12 (CCPA 1967.) Moreover, it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference. *Ex parte Levy*, 17 USPQ2d 1461, 1462 (BPAI 1990).

The Examiner stated that Karau would teach a process for separation from a non-aqueous homogeneous or colloidal solution of a catalyst, by referring to the abstract or column 2, lines 38-44. Applicant however submits that Karau teaches "a process for production of organic compounds in a membrane reactor with the aid of homogeneously or colloidally soluble catalysts" (abstract, col. 2, lines 38-44). Further, Karau teaches that the process for the production of organic compounds in a membrane reactor with the aid of homogeneously or colloidally soluble catalysts having increased molecular weight, by using as membrane an inorganic membrane that displays an inorganic backing layer and an inorganic interlayer, whereby the interlayer can be modified with organic groups.

Thus, Karau does not teach that a non-aqueous solution does prevail or that a separation takes place, as is claimed by applicant.

Furthermore the Examiner does not find Applicant's arguments persuasive with regard to not having to change the molecular weight of the solid substance being separated in Applicant's process according to Claim 1.

The Examiner states that he interpreted Claim 1 in assuming that the discriminating property between Applicant's invention and the teaching of the Karau reference is that the molecular weight of the solid substance in Applicant's process is not subject to changes during the separation process.

Obviously the previous illustrations and remarks provided by Applicant in previous responses were not understood or were left unconsidered by the Examiner, therefore resulting in the above referenced false interpretation of Applicant's Claim 1.

Applicant previously cited Column 4, lines 32-41 as well as Column 5, lines 17-25 and Example 2 to prove the discrepancy between the teaching of the Karau reference and Applicant's invention, in that Karau's disclosure is based on the fact that catalysts are needed for "increased molecular weight" to put the process to work.

As stated above, Karau refers to the use of catalysts "with increased molecular weight", which is defined in Column 5, lines 17-25, stating that the catalyst is increased "in molecular weight by means of adsorptive or covalent bonding to organic or inorganic homogeneously or colloiddally soluble support materials, e.g. nanoparticles". Thus, it is clear that Karau's membrane and the membrane as claimed by Applicant are entirely different. Otherwise, it would not be clear as to why Karau would require "increased molecular weights"? This is a redundant step (no matter at which time, whether before or within the separation) and one can therefore likewise argue that the membrane of Applicant has to have different properties as, in contrast to the teaching of the Karau reference, separation of not enlarged substances is ensured.

It should further be noted that the Karau reference is disclosing only "increased molecular weight" substances to be separated, whereby "increased molecular weight" – in absence of clear molecular weight definitions in the description – can only be read by the examples of a substance having a molecular weight of around 38 kDa (see example 2 of the Karau reference). Applicant's invention is capable of separating substances with molecular weights of from 180 g/mol (corresponds to about 180 Da) to 70.000 g/mol

(corresponds to about 70 kDa) without the need of modifying these substances in the pre-run of the separation (see Table 1 of Applicants invention).

Further, Karau discloses a membrane comprising an inorganic separation membrane (i.e. backing layer) having pore diameters of greater than 0.1 nm and comprising an interlayer having a pore diameter of less than 200 nm. (Col. 4, lines 1-8). The backing layer may be made up from one or more inorganic oxides, preferably alumina (Col. 4, lines 10-12). The interlayer is disclosed to be at least one (Col. 4, lines 12-13) and each of one can be made up from inorganic oxides as well (Col. 4, lines 13-14). The interlayer may be modified with organic components (Col. 4, lines 15-17).

In addition, Applicant's membrane differs from Karau in that the membrane is asymmetric, which is nowhere taught by Karau.

To more clearly claim the present invention, Applicant has amended claim 1 with the subject matter of claim 3 to make the distinctions between Karau clear.

Therefore, the Karau reference does not anticipate Applicant's claimed invention and the rejection of Claim 1 as being anticipated by Karau should now be withdrawn.

As Claims 2 to 8, 10, 11 and 15-17 are dependent on Claim 1 the rejection of these under 35 USC § 102(b) as being anticipated by Karau should be withdrawn as well.

#### REJECTIONS UNDER 35 USC 102 or 103(a)

**Claims 12-14 stand rejected under 35 U.S.C. 102(b) as being anticipated by Karau (US 6,472,571) or alternatively, the claims are obvious under 35 U.S.C. 103 (a) over Karau as applied to Claim 2 and further in view of WO 01/07157.**

Again, for anticipation, it is required requires that there is identity of invention. See MPEP 2131. See also *Glaverbel Societe Anonyme v. Northlake Mktg. & Supply*, 33 USPQ2d 1496, 1498 (Fed. Cir. 1995). Each and every element recited in a claim must be found in a single prior art reference and arranged as in the claims. *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). There must be no differences between what is claimed and what is disclosed in the prior art reference. *In re Kalm*, 154 USPQ 10, 12 (CCPA 1967.) Moreover, it is incumbent upon the

Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference. *Ex parte Levy*, 17 USPQ2d 1461, 1462 (BPAI 1990).

Applicant has discussed above (page 5 et seq.) the reason as to why claim 1 is not anticipated. Claim 12, which is dependent on claim 2 (adding the catalyst) is in turn dependent on claim 1, which is currently amended. Claim 12 -14 which add further limitations are indirectly dependent on claim 1 and therefore , are not anticipated for the same reasons as claim 1 is not anticipated.

Concerning the alternative obviousness rejection, applicants also directs the Examiner to the discussion of Karau, as provided above. The WO reference can not cure the deficiencies of Karau. A claim is properly rejected as obvious over a reference only when the differences between the claimed subject matter and the reference would have been obvious to a person of ordinary skill in the field at the time that the claimed invention was made. In addition, when an obviousness rejection is made over a combination of references, it must also have been obvious to a person of ordinary skill to combine the references as suggested by the Examiner.

As was pointed out above, Karau does not teach a process for the separation from a non-aqueous solvent of a catalyst which is present in the non-aqueous solvent in dissolved form or colloidal form without changing the molecular weight of the substance, by passing the non-aqueous solvent through a asymmetric, porous membrane having certain characteristics with least three layers, each of which has a pore size different from the other two layers and wherein the catalyst is selected from the group consisting of the organometallic complex compounds, ligands of organometallic complex compounds and complex compounds of elements of group IVA, VA, VIA, VIIA, VIIIA or IB of the Periodic Table of the Elements.

The WO reference only discloses an unsupported or supported arrangement of the membrane employed (page 10, last paragraph). If the membrane is supported, usage of a membrane layer formed as a thin skin on the microporous support is disclosed (page 11, lines 1-4).

Therefore, the differences between the claimed subject matter and the reference are not obvious to a person of ordinary skill in the field at the time that the claimed invention was made. In addition, when an obviousness rejection is

made over a combination of references as here, it is also not obvious to a person of ordinary skill to combine the references as suggested by the Examiner and result in the claimed invention. The combination of references simply does not result in subject matter as claimed in claims 12- 14.

Based on the differences between Karau reference and applicant's claimed invention, the WO reference does not teach the person of ordinary skill in the art , since the WO references only discloses a unsupported or supported arrangement of the membrane. If the membrane is supported, the usage of a membrane layer formed as a thin skin on the microporous support is disclosed (page 11, lines 1-4).

Therefore, no teaching can be found with regard to an asymmetric arrangement of at least three layers, each of which having a pore size different from the other two, as claimed in amended claim 1, from which claim 12 indirectly depends.

Claims 12 to 14 are dependent on Claim 2, which is again dependent on Claim 1 and therefore the rejection of Claims 12-14 under 35 USC § 103(a) as obvious over Karau as applied to Claim 2 and further in view of WO 01/07157 should now be withdrawn.

**Claims 1, 2, 7, 8 and 10-17 stand rejected under 35 U.S.C. 102 (b) as being anticipated by, or in the alternative under 35 U.S.C. 103 (a) as being obvious over Cohen (US 6,440,309).**

Applicant has amended claim 1 to incorporate subject matter of claim 3. The Examiner does not consider Cohen either anticipating or rendering obvious claim 3. Thus, since such subject matter is now in claim 1, the rejection of Claim 1 under 35 USC § 102 as being anticipated by Cohen is moot and should be withdrawn.

As Claims 2, 7, 8 and 10-17 are dependent on Claim 1 the rejection of these claims under 35 USC § 102 as being anticipated by Cohen should also be withdrawn.

Similarly, the obviousness rejection of claim 1, as amended should be withdrawn for the same reason, that is, the Examiner does not consider Cohen to render obvious claim 3. Thus, since the subject matter of claim 3 is now in claim 1, the rejection of Claim 1 under 35 USC § 103 as being obvious over Cohen is moot and should also be withdrawn.

As Claims 2, 7, 8 and 10-17 are dependent on Claim 1 the rejection of these under 35 USC § 103(a) as being obvious over Cohen et al. (US 6,440,309) should now be withdrawn as well.

**Claims 1- 8 and 10-17 stand rejected under 35 USC § 103(a) as being obvious over Cohen and further in view of WO 01/07157.**

It was previously submitted that Cohen is directed towards separation of liquid components from each other, and the membrane employed by Cohen for doing the same would never perform as the membrane in Applicant's claimed invention. It is not clear to applicant how the principles of inherency can remedy the vast difference between the amended claimed invention and Cohen. In addition, claim 1 was amended with limiting subject matter which teaches even further away from any teaching in Cohen. This shortcoming can not be overcome by the teachings of the WO '157 reference.

Accordingly, the combination of Cohen and WO '157 does not provide a person skilled in the art with the claimed invention.

Therefore the rejection of Claim 1 under 35 USC § 103(a) as being obvious over Cohen and further in view of WO 01/07157 should now be withdrawn.

As Claims 2-8 and 10-17 are dependent on Claim 1 the rejection of these claims as being obvious over Cohen in view of WO '157 should also be withdrawn.

In view of the present remarks, it is believed that claims 1-8 and 10-17 are now in condition for allowance. Reconsideration by the Examiner is respectfully requested, and the allowance is courteously solicited.

#### CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this response is required, Applicants request that this be considered a petition therefor. Please charge the required petition fee to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fee or credit any excess to Deposit Account  
No. 14-1263.

Respectfully submitted,

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